Review (the last session was selection statements)

Relational operators  
if, else, else if  
logical operators

Arrays

* Review:   
  A *variable* is a storage place in memory. It has a name and can hold one value (of any JS data type).
* An *array* is like a variable (we call it an *object*), but it can store more than one value.
* An array has an *index* that lets us access a particular *element* (storage spot) in the array.
* Declaring an array: var myArray = [];
* Storing values in an array: myArray[0] = “Yoda”;
* You can also use push: myArray.push(“Leia”);  
  Example: put a few more values in the loop
* Retrieving values from an array: alert(myArray[0]);  
  Example: display multiple values from a loop
* Arrays have a length property: var numElements = myArray.length;

Loops­

* Loops execute a block of code multiple times.
* There are several types of loops in JavaScript: while, do while, for, for in
* The *for* loop is used when you know how many times you want to *iterate* (go around the loop).  
  Examples:
  + // Display powers of a number  
    var base = 2;  
    // how many times will the loop execute? Final value of i?  
    for (i = 0; i < 5; i++)  
    {  
     result = Math.Pow(2, i);  
     // the + operator is used for concatenation here  
     answer = base + “ raised to the “ + i + “ = “ result;  
     alert( answer);  
    }  
    alert(“done”);
  + // Use a loop to display the contents of an array  
    // Number of iterations? Final value of i?  
    // i is for “index”  
    for (i = 0; i < length; i++)  
    {  
     alert(myArray[i]);  
    }  
    alert(“done”);
* The *while* loop iterates as long as a condition is true  
  Example:
  + // Enter values in an array until the user enters “done”  
    var name = “”;  
    var names = [];  
    while (name != done)  
    {  
     name = prompt(“Enter a name”);  
     names.push(name);  
    }